

IN THE DRAWINGS

Applicants acknowledge that the Examiner has accepted the drawings as filed on January 20, 2000.

REMARKS

Claim 2 has been amended. Claims 2-32, 35 and 36 remain pending.

The Examiner rejected claims 2, 3, 5, 6, 11-14, 16, 17, 21-25, 28, 29, 35, and 36 under 35 U.S.C. §103(a) as being unpatentable over *Wu* in view of *McHale* (US 6,278,728) and *Wiese* (US 6,434,119). Applicant respectfully traverses this rejection.

Claim 2 is directed to a method that calls for establishing a communication channel between a first transceiver and a second transceiver in low power mode; determining, at the first transceiver, a training parameter in response to establishing the communication channel in the low power mode; performing training, at the first transceiver, based at least on the training parameter; and providing the training parameter that is used in training of the first transceiver to the second transceiver.

Even though the Examiner purports to reject claim 2 under 35 USC 103 based on the combination of Wu, McHale, and Wiese, a closer inspection reveals that the Examiner has failed to establish a prima facie case of obviousness. It is well-established patent law that the claimed combination must teach each and every feature of the claim. As explained below, each of the cited references, when considered alone or in combination, fails to disclose all of the claimed features.

First, claim 2 calls for determining a training parameter in response to establishing the communication channel in the low power mode. The Examiner argues that *Wiese* discloses establishing a communication channel in the low power mode, and asserts that the other two references, namely Wu and McHale, teach determining a training parameter. See Office Action, pp. 3-4. The Examiner, however, overlooks that claim 2, in fact, specifies not only establishing

determining the training parameter, but rather determining this parameter in response to establishing the communication channel in the low power mode. The Examiner is unable to show that the training he alleges occurs in Wu and McHale happens “in response” to establishing a communication channel in the “low power mode.” That is, even assuming *arguendo* that Weise discloses the low power mode feature, and Wu and McHale disclose the training feature, as the Examiner alleges, the Examiner has failed to show that the training in Wu and McHale occurs “in response” to establishing a communication channel in the “low power mode.” In fact, the references teach the opposite. For example, Wu expressly teaches that the initialization process is “quite similar to the activation and acknowledgement routines performed *in conventional ADSL modem systems*.” Wu, 11:34-40 (emphasis added). And, as the Applicants note in the Background of the Patent Application, the conventional xDSL systems perform training at high power levels, not in a low power mode. Thus, not only do the cited references not teach the claimed feature, they teach away from the claimed combination.

The cited references also fail to teach other features of claim 2. For example, claim 2 calls for (1) determining a training parameter and performing training based on that parameter at the first transceiver and (2) providing the training parameter that is used for training by the first transceiver to the second transceiver. That is, the claim calls for providing to the second transceiver a training parameter that is also used by the first transceiver for training. None of the cited reference teaches this claimed feature. The Examiner correctly admits that Wu does not teach this feature. Office Action, p. 3. Specifically, the Examiner admits that “Wu does not explicitly teach the first transceiver determining the training parameter, performing the training parameter, and transmitting the training parameter to the second transceiver.” *Id.* (emphasis added). The Examiner also admits that McHale at least does not teach transmitting the training

parameter to the second transceiver. See Office Action, p. 4 (although arguing that McHale teaches calculating a training parameter and performing training based on that parameter, the Examiner does not argue or suggest that McHale teaches providing the training parameter to the other transceiver). Indeed, McHale does not disclose providing any training parameters to another modem, much less transmitting a training parameter that itself is used by the transmitting modem. Thus, based on the Examiner's admissions, none of the references teach transmitting a training parameter used by the first transceiver (for its own training) to a second transceiver. For this additional reason, claim 2 is allowable.

The Examiner's application of Wu to the claims is erroneous. The Examiner asserts that Wu teaches determining a training parameter at step 70C of Figure 9. See Office Action, p. 3. Step 70C discloses measuring the PSD REVERB signal to derive power spectrum density (PSD). Thus, according to the Examiner, the PSD corresponds to the "training parameter." But the PSD (i.e., "training parameter," according to the Examiner) is neither used to train the first modem 20, nor is it transmitted to the remote modem 10 (recall claim 2 calls for the first transceiver to train based on the determined training parameter and to provide the parameter to the second transceiver). Instead, Wu explains that the PSD is calculated so that the TEQ signal can be transmitted at the PSD level. See Wu, 12:61-6 (stating that the TEQ signal is transmitted over the twisted pair wire to the remote modem 10 "at a power spectrum density (PSD)") (emphasis added). Indeed, block 72 C of Figure 9 shows that the TEQ signal (and not the PSD!) is transmitted to the remote modem 10. Moreover, Wu explains that central modem 20 (which, according to the Examiner, corresponds to the "first transceiver" of the claim) does not perform training based on the PSD, rather it performs training (see block 74C) on TEQ signal transmitted

by the remote modem 10. For the aforementioned reasons, the Examiner application of Wu is erroneous.

In short, the Examiner has failed to show that the cited references disclose a training parameter that is (1) determined at the first transceiver; (2) used by the first transceiver to perform training; and (3) provided to the second transceiver. The Examiner is invited to specifically identify where such a training parameter is disclosed in the references.

The Examiner appears to suggest that the above missing claimed feature is “identical” to the teachings on McHale and Wu. However, does not cite to any other reference in support of this conclusion. Because the Office **cites no references** to support this “obviousness” assertion, the applicant infers that the Examiner makes this assertion based on **personal knowledge**. However, no **supporting affidavit** has been made of record. The applicant respectfully requests that prior art be provided to substantiate this “obviousness” assertion or that an **affidavit** be filed in accordance with 37 C.F.R. § 1.104(d)(2), which states (emphasis added):

(2) When a rejection in an application is based on facts **within the personal knowledge** of an employee of the Office, the data shall be as specific as possible, and the reference **must be supported, when called for by the applicant, by the affidavit of such employee**, and such affidavit shall be subject to contradiction or explanation by the affidavits of the applicant and other persons.

Consequently, the applicant respectfully and seasonably requests the Office to either (1) **cite a reference** in support of this position, or (2) **provide a Rule 104(d)(2) affidavit** from the Examiner supporting any **facts within the personal knowledge of the Examiner**, as also set forth in M.P.E.P. § 2144.03.

Claim 2 and its dependent claims are thus allowable for at least the reasons presented above. Additionally, the other pending claims, to the extent they call for one or more of the above-noted missing features, are also allowable for these reasons.

Reconsideration of the present application is respectfully requested. In light of the arguments presented above, Applicants respectfully assert that all claims are allowable. Accordingly, a Notice of Allowance is respectfully solicited.

If for any reason the Examiner finds the application other than in condition for allowance, the Applicants request an interview with the **Examiner** and the **Examiner's supervisor** once the Examiner has had an opportunity to study this Response. The Examiner is requested to call the undersigned attorney at the Houston, Texas telephone number (713) 934-4064.

Respectfully submitted,

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